

## PROPOSAL EVALUATION

### *Proposition 1E Integrated Regional Water Management (IRWM) Grant Program* *Stormwater Flood Management Grant, Round 2, 2013*

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<b>Applicant</b>	East Bay Municipal Utility District	<b>Amount Requested</b>	\$ 5,000,000
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<b>Proposal Title</b>	Chabot Dam Seismic Upgrade	<b>Total Proposal Cost</b>	\$ 19,225,125
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#### PROJECT SUMMARY

The project is located on San Leandro Creek in Alameda County. The project entails earthwork upgrades to the downstream toe of Chabot dam and the completion of a seismic retrofit of the tower outlet structure. The initial conceptual level design for the retrofit was completed in July of 2012. Other goals are enhancement of recreational resources, water quality through sediment entrainment, and emergency water supply.

#### PROPOSAL SCORE

Criteria	Score/ Max. Possible	Criteria	Score/ Max. Possible
Work Plan	12/15	Technical Justification	6/10
Budget	2/5		
Schedule	4/5	Benefits and Cost Analysis	27/30
Monitoring, Assessment, and Performance Measures	3/5	Program Preferences	9/10
Total Score (max. possible = 80)			63

#### EVALUATION SUMMARY

##### WORK PLAN

The criterion is fully addressed but is not supported by thorough documentation or sufficient rationale. The applicant addresses the seismic upgrade goal of the project and includes supporting technical documentation. However, supporting information pertaining to other objectives claimed with implementation of the project, including emergency water supply, water quality, and recreational benefits, is minimal. For example, it is claimed that sediment moving downstream would potentially damage environmental features associated with San Leandro Creek and the Bay, with no supporting information given or cited. Also, data management procedures are not discussed in the work plan.

## **BUDGET**

The budget for the proposed project does not include detailed cost information as described in Attachment 4, many of the costs cannot be verified as reasonable and supporting documentation is lacking for some of the budget categories described. For example, subtasks identified in the detailed budget tables (Table 4.2 and 4.3) are not consistent with those used in the work plan. For instance, Table 4.2 includes c.4 “Embankment Upgrade Design” but the work plan identifies c.4 as “Permitting”. Costs shown for some budget categories in the budget are not supported by documentation. For instance, no explanation or documentation was found supporting costs for budget category (E) Environmental Compliance/Mitigation/Enhancement, a \$1 Million Task.

## **SCHEDULE**

The schedule is consistent with the work plan and budget, and demonstrates a readiness to begin construction or implementation no later than October 2015. Timelines provided for some tasks appear unreasonable. For example the list of potential permits required is extensive and should take longer to obtain than the 20 days indicated in the schedule. This may impact the start of Construction of the earliest scheduled project component; however, it does appear reasonable that construction can begin by October 2015. Also, the schedule allows one day of working time for the Final Report, which is unreasonable. And the Final Report completion date occurs before the end of project construction.

## **MONITORING, ASSESSMENT, AND PERFORMANCE MEASURES**

The criterion is less than fully addressed and documentation or rationales are incomplete or insufficient. The identified monitoring targets are appropriate for the benefits claimed; however, the number of monitored elements is inadequate for evaluation of all claimed project benefits. Only hydrology and water quality performance measures are listed, omitting, among others “Preserve the recreational resources”, another project objective. The tools utilized in executing methods and achieving desired targets are not specifically identified. For example, “water quality sampling” should be supported with the tools in which to conduct such tests. Also, target numbers are not given. For example Table 6.2 states a 50% reduction in TSS during a <100-year storm event with no baseline value given for pre- and post-project comparisons.

## **TECHNICAL JUSTIFICATION**

Proposal appears to be technically justified to achieve the claimed benefits but lacks documentation that demonstrates the technical adequacy of the project. Benefits associated with flood reduction are discussed in detail; however, benefits of recreational loss, emergency water supply loss, and irrigation supply may be overstated. Currently, there is no direct connection from Lake Chabot to the potable water distribution system. Irrigation and other non-potable water usage are not discussed in sufficient detail with respect to access and acreage of use. Also, assumptions regarding recreational use with a change from lake-based to stream-based (see Table 7.13) are not supported in sufficient detail.

## **BENEFITS AND COST ANALYSIS**

Collectively the proposal is likely to provide a high level of benefits in relationship to cost and this finding is supported by detailed, high quality analysis and clear and complete documentation. Total Net Present Value (NPV) of costs is \$16.347 million. Benefits, which are benefits of the existing facility relative to no facility, include flood damage reduction (\$246 million NPV), avoided dam removal costs (\$23 million), avoided costs of emergency water supplies (\$4.45 million), avoided costs of supplying potable water (\$1.17 million), and recreation (\$16.54 million). The benefits of preserving the

existing uses far outweigh the costs of the upgrades. Total NPV of benefits are \$267.7 million, so the project appears to be highly economical.

## **PROGRAM PREFERENCES**

Applicant demonstrates a high degree of certainty that the proposal will achieve 4 program preferences and 5 statewide priorities through the implementation of the project, and documents the magnitude and breadth of them. The proposal will achieve the following: 1) Include regional projects or programs; 2) Effectively integrate water management programs and projects within hydrologic region; 3) Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program; 4) Address critical water supply or water quality needs of disadvantaged communities within the region; 5) Drought Preparedness; 6) Use and Reuse Water More Efficiently; 7) Climate Change Response Actions; 8) Practice Integrated Flood Management, and; 9) Protect Surface Water and Ground Quality.